IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: MAHN Andreas, et al.

Application No: 10/500,264 Group Art Unit: 1638

Filing Date: December 8, 2004 Examiner: Cathy Kingdom Worley

DECLARATION PURSUANT TO 37 C.F.R. 1.132

I, Klaus Düring hereby declare:

1. I received a Ph.D. from the University of Cologne, Germany and have worked in the field of plant molecular biology for more than 20 years. I am one of the inventors of US2004016028 "Method for generating or increasing resistance to biotic or abiotic stress factors in organisms" which relates to potato plants transformed with a cDNA for an ATP/ADP transporter in sense or antisense orientation according to the present application and I am co-inventor of several further applications relating to transgenic potato plants. I served as Chief Executive Officer at Molecular Plant and Protein Biotechnology Cologne GmbH, Cologne, Germany which focused on transgenic potato plants and I am familiar with the experiments and work of the inventors which led to the present invention.

2. I am the assignee of the application and I have read and understood the Office Action dated December 6, 2007. I understand that the claims were rejected for lack of enablement and that the Examiner has invited the applicant to provide data showing the total protein content in transgenic potatoes according to the invention.

3. The following data regarding the total protein content is provided:

Tubers from transgenic potato plant lines containing a sense and an antisense ATP transporter gene construct, respectively, were analyzed for total protein content.

Lines:

Désirée:	non-transgenic, native potato cultivar
DK1:	transgenic potato line var. Désirée, containing pNos-npt II gene construct

DK

MPB/sATPT/08: transgenic potato line var. Désirée, containing pNos-npt II gene construct and sense plastidiary ATP/ADP transporter construct

MPB/sATPT/12: transgenic potato line var. Désirée, containing pNos-npt II gene construct and sense plastidiary ATP/ADP transporter construct

MPB/sATPT/17: transgenic potato line var. Désirée, containing pNos-npt II gene construct and sense plastidiary ATP/ADP transporter construct

MPB/aATPT/05: transgenic potato line var. Désirée, containing pNos-npt II gene construct and antisense plastidiary ATP/ADP transporter construct

MPB/aATPT/13: transgenic potato line var. Désirée, containing pNos-npt II gene construct and antisense plastidiary ATP/ADP transporter construct

MPB/aATPT/22: transgenic potato line var. Désirée, containing pNos-npt II gene construct and antisense plastidiary ATP/ADP transporter construct

all lines are described in:
Tjaden et al., Plant Journal, 16 (1998), 531-540

Total protein content was analyzed using the standard Bradford assay and standard commercial reagents and is shown in Table 1 and Figure 1.

The results for the antisense lines being of interest in this context were considered not to be significantly different from the native Désirée and the transgenic Dk1 control lines. Thus there is neither a reduction nor an increase of the total protein content in these lines but the amount of total protein unexpectedly remained unchanged compared to the two controls (native and transgenic).

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that theses statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

2. April 2008

Klaus Düring

Dr. Klaus Düring

Table 1: Bradford assay for determination of total protein content of potato tubers:

all values relative to Dk1

	npt - only	native	sense lines			antisense lines		
	Dk1	Désirée	MPB/sATPT/08	MPB/sATPT/12	MPB/sATPT/17	MPB/aATPT/05	MPB/aATPT/13	MPB/aATPT/22
sample 1	100,00	88,90	93,80	102,50	79,00	109,90	102,50	88,90
sample 2	100,00	95,00	92,90	100,00	77,00	103,80	96,70	84,90
sample 3	100,00	93,60	86,70	92,40	72,30	103,80	92,00	84,80
sample 4	100,00	88,70	89,90	93,30	70,60	104,20	94,50	85,70
mean value	100,00	91,55	90,83	97,05	74,73	105,43	96,43	86,08
standard deviation	0,00	3,23	3,22	4,97	3,93	2,99	4,48	1,93

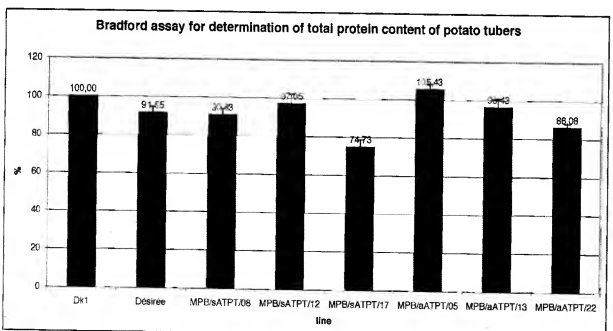

Fig. 1